



MEMORANDUM

TO: Toni Jones, U.S. Environmental Protection Agency
FROM: Eastern Research Group, Inc.
DATE: January 12, 2011
SUBJECT: Revised Economic Impact Analysis Inputs for Existing CISWI Units

BACKGROUND

The U.S. Environmental Protection Agency (EPA), under section 129 of the Clean Air Act (CAA), is required to regulate emissions of nine pollutants from Commercial and Industrial Solid Waste Incineration (CISWI) units: hydrogen chloride (HCl), carbon monoxide (CO), lead (Pb), cadmium (Cd), mercury (Hg), particulate matter (PM), dioxins/furans (PCDD/PCDF), nitrogen oxides (NO_x), and sulfur dioxide (SO₂).

On December 1, 2000, EPA adopted new source performance standards and emission guidelines for commercial and industrial solid waste incineration units established under Sections 111 and 129 of the Clean Air Act. In 2001 EPA was granted a petition for reconsideration regarding the definitions of "commercial and industrial waste" and "commercial and industrial solid waste incineration unit." In 2001, the United States Court of Appeals for the District of Columbia Circuit granted EPA's voluntary remand, without vacatur, of the 2000 rule. In 2005, EPA proposed and finalized the commercial and industrial solid waste incineration definition rule which revised the definition of "solid waste," "commercial and industrial waste," and "commercial and industrial waste incineration unit." In 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the 2005 commercial and industrial solid waste incineration definition rule.

These final standards provide EPA's response to the voluntary remand that was granted in 2001 and the vacatur and remand of the commercial and industrial solid waste incineration definition rule in 2007. In addition, the standards re-development includes the 5-year technology review of the new source performance standards and emission guidelines required under Section 129. The EPA has developed a series of maximum achievable control technology (MACT) floor options to support that re-development. The development of the MACT floors used to determine these options is discussed in more detail in a separate memorandum.¹ The purpose of this memorandum is to present the information required for an economic impact analysis for existing sources.

ECONOMIC INPUTS

EPA's solid waste definition rule defines which non-hazardous secondary materials that are used as fuels or ingredients in combustion units are solid wastes under Subtitle D of RCRA. Table 1 shows economic inputs for the 65 facilities with existing CISWI units that we anticipate will still be in operation as of the rule's implementation.

Facility information comes primarily from responses to the Phase 1 survey², and has been provided by the actual respondent. This includes the small/large entity classification.

In a few cases, incomplete responses to the survey resulted in data gaps. Many of these were filled in by reviewing the corporate entities' website or business data websites for general number of employees or annual sales information. Then, by comparing this data to the U.S. Small Business Administration's (SBA) small business definitions, determinations were made on whether the corporation is a small or large entity.

Annual sales data were obtained through online resources, mainly through business information websites and corporate U.S. Securities and Exchange Commission report data. The URL for the sales data are listed in the spreadsheet. In a few cases, facility specific sales data were unavailable. In these instances, a subcategory average value was used. If this average exceeded corporate sales, then the corporate sales value was assumed for the facility.

Compliance costs associated with compliance with the final emission limits are presented in the MACT Compliance TCI (total capital investment) and MACT Compliance TAC (total annual costs), and are the results of control and monitoring cost calculations presented in the cost analysis.¹ Note that costs are annualized at a 7% interest rate. For subcategories of units that may have the option of disposing of waste in a landfill or municipal waste combustor, the cost of hauling and tipping fees have been summed up and presented for the facilities that this may apply to. The lowest cost alternative (i.e., compliance or alternative to combustion) is presented in the Lowest Cost columns.

REFERENCES

1. "Revised Compliance Cost Analyses for CISWI Units" Memorandum from Eastern Research Group, Inc. to Toni Jones, U.S. Environmental Protection Agency. January 12, 2011.
2. *Questionnaire for Boilers, Process Heaters, Incinerators and Other Combustion Units: Survey Overview*. OMB Control No. 2060-0616, <http://survey.erg.com/ss/wsb.dll/s/7g8d>